Attorney Docket No.: 7463-44 Motorola Ref: C12694JME Goudarzi

## **CLAIMS**

What is claimed is:

1. A method of soldering a shield on a substrate, comprising the steps of:

applying solder onto conductive areas on the substrate including a conductive shield track for at least one shield;

placing components, if any, onto the conductive areas for the components; reflowing the substrate providing a selectively solder cladded area over the conductive shield track;

applying flux to the to one among the at least one shield and the solder cladded area;

placing the shield over the solder cladded area; and reflowing the substrate including the shield over the solder cladded area.

- 2. The method of claim 1, wherein the method further comprises the step of cleaning the substrate after reflowing the substrate when providing the solder cladded area.
- 3. The method of claim 1, wherein the step of applying flux further comprises the step of picking up the at least one shield and dipping the shield into the flux.
- 4. The method of claim 1, wherein the step of applying solder paste onto the conductive shield track comprises the step of over printing the solder to increase the solder volume to the conductive shield track to accommodate for the shield's non-coplanarity.
- 5. The method of claim 1, wherein the step of placing components comprises the step of placing surface mount components onto the substrate.

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6. The method of claim 1, wherein the step of applying solder comprises the step of applying solder paste onto the conductive areas forming conductive pads for the components and the shield track.

- 7. The method of claim 1, wherein the step of applying solder comprises the step of applying solder preforms onto the conductive areas.
- 8. The method of claim 1, wherein the step of applying solder comprises the step of screen printing solder paste onto the conductive areas.
- 9. A method of attaching a shield to a substrate, comprising the steps of:

  circumscribing a predetermined area on the substrate with at least a portion of
  a metallized trace pattern;

applying solder to the metallized trace pattern;
placing components on portions of the metallized trace pattern;
reflowing the solder to form a cladded trace pattern on a portion of the
metallized trace pattern reserved for the shield;

placing the shield on the cladded trace pattern; and reflowing the substrate.

- 10. The method of claim 9, wherein the step of applying solder comprises the step of applying solder paste to the metallized trace pattern.
- 11. The method of claim 9, wherein the step of applying the solder comprises the step of applying solder preform to the metallized trace pattern.
- 12. The method of claim 9, wherein the step of placing components comprising the step of placing a semiconductor die on portions of the metallized trace pattern.

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## 13. A product having a substrate, comprising:

solder applied onto conductive areas on the substrate including a conductive shield track for at least one shield;

components placed onto the conductive areas for the components, wherein the solder paste applied to the conductive runner is reflowed providing a selectively solder cladded area over the conductive shield track;

a metallic shield place over the selectively solder cladded area, wherein the substrate including the shield over the selectively solder cladded area is reflowed.

- 14. The product of claim 13, wherein the components placed onto the conductive areas for the components are surface mounted components.
- 15. The product of claim 13, wherein the solder applied onto the conductive areas is solder paste.
- 16. The product of claim 13, wherein the solder applied onto the conductive areas is solder preforms.

## 17. A processed printed circuit board, comprising:

a predetermined area on a substrate defined by a metallized trace pattern; solder applied to the metallized trace pattern;

components placed on portions of the metallized trace pattern, wherein the processed printed circuit board is reflowed a first time; and

a shield placed over a cladded portion of the metallized trace pattern, wherein the processed printed circuit board is reflowed a second time.